

2013 BOV Report
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1. What are the major factors in your discipline that are currently shaping its long term, strategic evolution?

From the broader research perspective at SIS, the main trends are

- The important research problems increasingly require multi-disciplinary teams. I believe this is the case for several reasons. First, the problems that make a difference to the country (e.g., energy, security, employment) are complex in nature and cannot be solved by narrowly informed teams. Second, our ability to "instrument" our environment to collect data to address these problems/needs is growing rapidly. Thus, teams must increasingly include subject matter specialists; "instrument"/sensor designers; data analysts who can collect, manage, store, process, present, etc. the collected data in a useful way; and possibly others
- Managing these teams and the information they produce will become increasingly complex and may evolve into a specialization of its own
- These capabilities will be costly, which is problematic in a federal funding environment that will most likely be flat to declining. Further, the overall educational funding picture will increase the competition for these funds.

From an operational perspective, there is no reason to believe that the enrollment trends we are seeing in IS & Tele are going to change significantly in the near term. Having said that, relying on international students is an extraordinarily risky proposition for SIS; therefore, active measures need to be taken.

2. What is the impact of these factors? Why are they so important? What difference do they make?

On the research front, SIS is particularly well situated to deal with large, diverse teams, especially if we can learn how to engage in multidisciplinary research in a systematic way. Such a capability could, in fact, be a defining attribute of our school (if it is even possible) since the problem is so challenging. I believe doing so would require a cultural commitment by the faculty of the school to this challenge, which in itself is challenging with respect to career processes like promotion and tenure. We can do little to alter the federal funding and public support trends, so the best we can do is to engage with each other and with funding agencies to ensure that we send the best, most relevant proposals we can. We can also work with IA to identify relevant foundations. Corporate contracts often falter on intellectual property agreements.

On the enrollment front, any possible corrections are necessarily long term. Diversifying the countries of origin of our students means active outreach. Many international students find our tuition expensive, especially in light of tuition rates of their domestic alternatives (where equivalent quality choices exist). Increasing domestic enrollments is

probably best achieved by focusing on the undergraduate program. Improving the quality and number of BSIS students means engaging with high schools in deeper ways, which we are currently not equipped for.

3. How do these factors affect the future of SIS and your program?

In general, the school is reasonably well positioned to address many of the fundamental research issues in its scope. Because the information environment is changing so rapidly, it is often not possible for faculty members to respond quickly enough to emergent problems because of other commitments making demands on their time and the lack of a consistent funding stream that would enable them to build more persistent teams.

The emerging research funding environment will place a premium on strong prior performance, ability to work effectively in multidisciplinary teams and the ability to respond to diverse opportunities in a timely fashion. It also would suggest alternate sources of funding, such as foundations, which require a very different set of professional networking contacts and skills.

From an enrollment perspective, the “monoculture” of international students in the graduate IS and Tele programs create a significant financial exposure to factors far outside our control, such as international political factors, currency fluctuations, etc.

4. How can the School respond most effectively to these factors?

At the Chicago “New Configurations” workshop, Prof. Bill Arms noted that iSchools in general lack relatively persistent research teams that can be tasked to emergent opportunities in exploratory ways. Such teams would be able to prototype solutions to technical problems in the information field in relatively rapid fashion and provide the foundation for larger research proposals that address those problems in a more systematic fashion.

Building this capability requires a consistent funding stream and cannot be constructed only from PhD students, as they (hopefully) graduate after a few years. While PhD students are clearly part of the picture, such teams must be anchored by research scientists who provide a level of consistency and professionalism that cannot be achieved by students alone. While faculty members provide a great deal of consistency, their attention is often divided among several projects, including instruction, professional service, and university service, in addition to research.

Another response is to find ways of actively cultivating effective multidisciplinary. Success in this may become an attractive and defining feature of the School from a research perspective. Equally important is to develop a culture in which we learn from successes and failures in research, research funding and multidisciplinary experiences.

The natural response to the enrollment tendencies is to diversify. This means actively developing domestic students as well as a stream of students from a wide range of countries so that we do not become overly exposed to factors affecting only one country (e.g., China).

In the research arena, natural partners are the traditional funding agencies as well as foundations that might support projects of mutual interest. The research faculty of other iSchools would be partners in developing a culture of multidisciplinary, as would colleagues in cognate disciplines who would value the expertise in place at SIS.

In the enrollment area, high schools might be natural partners in developing a stream of domestic students for our programs, as might community colleges and four year colleges. Internationally, we could benefit from finding creative ways of working with our iSchool partners in other countries, as well as developing new relationships that are mutually beneficial.

5. What would an effective response look like and what difference would it make?

It is hard to know exactly how an effective response would look. I would expect that a core research staff mostly funded out of “soft money” that would consist of people capable of designing, building and evaluating systems that address the information problems described above. They would necessarily be closely attuned to the emergent problems of the discipline along with full time faculty members

Such a capability would allow iSchools to achieve high visibility on the national and international stages as they would often be early contributors to emergent research discussions. It is quite possible that a positive feedback cycle could emerge where these teams would find it easier to attain funding, further strengthening their capability.

For multidisciplinary, there are a couple of approaches that could be useful. One is to provide a way for potential partners to engage with the school without the need for prior contacts. In the long run, this might evolve into some sort of center with a focus on multidisciplinary projects.